

PMCI2

DEVELOPMENT OF COST CATALOGS FOR COST-EFFECTIVENESS ANALYSES IN GERMANY: RESULTS OF A FEASIBILITY STUDY

Scheuringer M, Krobot KJ

MSD Sharp & Dohme GmbH, Haar, Germany

OBJECTIVES: The aim of the review was to evaluate the efficacy and safety of imiquimod 5% cream compared with vehicle for treating superficial basal cell carcinoma. **METHODS:** The analysis was performed in accordance with the rules of systematic review, based on the Cochrane Collaboration (Cochrane Reviewer's Handbook) guidelines and the Health Technology Assessment Agency in Poland (AOTM) recommendations. **RESULTS:** Two multicenter, vehicle-controlled, randomized clinical trials of high quality were identified according to predefined selection criteria. Treatment with imiquimod 5% cream once a day, 3 times per week resulted in significantly greater complete response rate than vehicle in the period of 6 as well as 12 weeks. Probability of achieving the complete response rate (no histological evidence of superficial basal cell carcinoma in the excised post-treatment target tumor tissue) was significantly greater for imiquimod 5% cream than vehicle and amounted to 18.2 (95% CI: 4.19; 84.84) and 146.14 (95% CI: 69.3; 323.75) respectively at 12 and 6 weeks after treatment. The incidence of adverse events during the treatment period such as application site reaction including itching, pain and tenderness at the target tumor site and local skin reaction such as erythema, scabbing, were more frequently recorded in the group of subjects who received imiquimod 5% cream in comparison with the vehicle group. **CONCLUSIONS:** Imiquimod 5% cream appears to be effective in the treatment of superficial basal cell carcinoma. A 3 times a week dosing demonstrates high efficacy results with acceptable safety profile, during the 6 as well as 12-week period.

PMCI3

INDIRECT COST OF ILLNESS IN POLISH ECONOMIC EVALUATION OF HEALTH CARE PROGRAMMESWróna W¹, Golicki D¹, Goszczynska K², Wojcik R³, Niewada M⁴, Jakubczyk M¹,Macioch T¹, Hermanowski T¹¹Department of Pharmacoeconomics, Medical University of Warsaw, Warsaw, Poland,²Medical University of Warsaw, Warszawa, Poland, ³Medical University of Warsaw, Warsaw, Poland, ⁴Department of Experimental and Clinical Pharmacology, Medical University of

Warsaw, Warsaw, Poland

OBJECTIVES: The inclusion of indirect costs of illness in pharmacoeconomics studies is still a subject of considerable debate. The aim of the systematic literature review was to present the Polish economic practice concerning indirect costs evaluation of health care interventions. Study was conducted as a first stage of a research project aimed at developing recommendation for methods of calculating indirect cost in Poland. **METHODS:** MEDLINE, EMBASE, Cochrane Library and Polish Medical Bibliography (PBL) were searched. Cut-off dates were set to February and March 2009. The main specific keywords were 'indirect costs' or 'costs and cost analysis'. Extracted data covered: type of study, disease under study, methods for evaluating indirect cost, measures of productivity loss value and share in total costs. **RESULTS:** Nineteen studies fulfilled the inclusion criteria for this review, of a total of 2300 references. Seventeen out of 19 studies were cost of illness studies, 2 were economic analyses. Methods of evaluating indirect costs were all based on human capital approach. The work absenteeism unit time measure used to value productivity loss were average salary (9/19), Gross Domestic Product (GDP) per capita (7/19), Gross National Product per capita (1/19), GDP per active worker (1/19), sold production of industry per active worker (1/19). Mean indirect costs amounted to 58% of total costs, with a range of 16%-98%. In 5 studies transfer payments (e.g. sick leave) were added to productivity loss category. **CONCLUSIONS:** Indirect cost is rarely included in the economic analyses in Poland. Different methods calculating indirect cost limit comparison between studies and call for development of robust and widely accepted methodology.

PMCI4

THE COST OF ABSENTEEISM IN POLAND IN 2007—DIFFERENCES WITHIN THE PROVINCES

Macioch T, Jakubczyk M, Wróna W, Golicki D, Hermanowski T, Niewada M

Medical University of Warsaw, Warsaw, Poland

OBJECTIVES: Absenteeism is a major cause of indirect costs of illness. In Poland precise data regarding days of work lost due to illness are collected by Social Insurance Institution (ZUS). The aim of this study was to estimate absenteeism costs in Poland in 2007 based on average monthly gross wages and salaries. **METHODS:** Human capital approach was used to estimate absenteeism costs. We used ZUS and Central Statistical Office (GUS) data. Average monthly gross wages and salaries estimates were calculated taking into consideration sex and province specific data. The analysis was based on an assumption that number of missed days includes only working days (252 days per year). This assumption was tested within the range of 226 to 365 days (either including all calendar days or additionally subtracting 26 days of holidays). Values are presented in Euro (exchange rate: 1 Euro = 4,50 PLN). **RESULTS:** Total costs of absenteeism in 2007 were estimated to amount of €5.3 billion (range €3.7–€5.9 billion). In Silesia province the cost of day of sickness absence estimated per person employed was nearly twice as high as in Podlaskie province. Total costs of absenteeism calculated based on GDP per capita were similar, however there were some differences among territory specific estimations. Cost data based on GDP per capita or average monthly gross wages were approximately twice as high as ZUS data on the amount of funds spent on sick pay. **CONCLUSIONS:** Given that several predictors of sickness

absence are not accounted to GDP per capita or average monthly gross wages and salaries based estimation, it seems that ZUS data on amount of mean sick pay may provide a reliable tool for absenteeism costs estimation in Poland.

PMCI5

A STANDARD COST TOOLKIT FOR ECONOMIC EVALUATIONS OF CANCER CARE IN FRANCEBaffert S¹, Alfonsi A², Florentin V², Livartowski A¹¹Institut Curie, Paris, France, ²Roche, Neuilly sur Seine, France

Economic evaluation requires identification and measurement of resources from various viewpoints (patient, hospital, health insurance, society). Although the hospital resources are easily identified, resources such as travel expenses or loss of productivity are often more difficult to measure or valorize. **OBJECTIVES:** To identify these various costs or cost determinants and specify for whom, for what and where they can be found in order to construct a standard costs toolkit including source data and costs per patient. **METHODS:** A check-list of costs items from various viewpoints has been established. Two approaches were combined: 1) The first consisted of detailed examination of freely available databases, data derived from national institute or ministry websites, this first step has been realized, and 2) The second consisted of analyzing costs or parameters usually difficult to estimate. We tried to quantify these costs items. **RESULTS:** The various items and the various possible types of measurements were listed. In the example of loss of productivity related to sick leave of a cancer patient, several parameters are required in order to perform the calculation by type of cancer. Gross domestic product is the starting point to determine the added value generated by an actively employed individual. We then calculated the mean added value of an actively employed individual (€3800 per month) and took the mean duration of sick leave of 120 days into account. Losses of productivity are estimated by cancer site and are about €1900 per incident patient and per year. According to national health insurance and survey on national thirty long-term diseases, travel expenses are about €500 on average per cancer patient and per year. **CONCLUSIONS:** Making a standard cost toolkit available could improve and foster the economic assessment processes in France.

PMCI6

QUALITY ASSESSMENT OF PUBLISHED HEALTH ECONOMIC ANALYSES FROM CHINAKaas C¹, Jing L², Bao Y³, Hemels M⁴¹Copenhagen University, Copenhagen, Denmark, ²Novo Nordisk (China) PharmaceuticalsCo. Ltd, Beijing, China, ³China Center for Pharmacoeconomics & Outcomes Research,Beijing, China, ⁴Novo Nordisk A/S, bagsvaerd, Denmark

OBJECTIVES: Good quality health economic (HE) analysis could be an important tool in guiding (cost) efficiency in health care development in China. To review HE analyses from China and assessing their quality using a standardised questionnaire. **METHODS:** Search of MEDLINE and EMBASE (1964–2008) using key words: China, cost-utility analysis (CUA), cost-effectiveness analysis (CEA), cost-minimisation analysis (CMA), cost-benefit analysis (CBA), and cost analysis (CA). Included were original HE evaluations examining a (medical) treatment/programme in a Chinese setting (including Hong Kong and Taiwan) describing costs and/or consequences in English or Chinese language. Quality was independently assessed by 4 raters using a 13 items checklist derived from previously published HE assessments. Obtainable scores were 0 ("Incorrect"), 1 ("Not Reported"), 2 ("Doubtful"), 3 ("Acceptable"), 4 ("Correct") or N/A if not applicable. Post-hoc analyses were carried out to determine a time trend in quality or whether the observed differences in quality scores between languages existed. **RESULTS:** 36 articles were included for assessment: 17 CEAs, 7 CBAs, 7 CUAs, and 5 CAs. No article used CMA. Majority of the evaluations was conducted in mainland China (64%), 31% in Hong Kong, and 5% in Taiwan. Mean quality score of all articles was 'Acceptable' (mean = 3.1; SD = 0.58) ranging from 2.0–4.0. Post hoc analyses demonstrated that English publications had a significant higher ($p < 0.0005$, Mann-Whitney U test) quality (mean = 3.5; SD = 0.45) compared to Chinese (mean = 2.8; SD = 0.46). No significant time trend existed. **CONCLUSIONS:** HE analyses from China were considered 'Acceptable' and their quality was similar to previous assessments. Post-hoc analysis suggested a significant difference between analyses published in English compared to Chinese. This study's major limitation is that low quality scores may be caused by poor reporting rather than poor research. Further research is needed to determine the underlying reasons of the quality and examine the impact of analyses on decision-making.

PMCI7

SHOULD INDIRECT COSTS OF ILLNESS BE INCLUDED IN PHARMACOECONOMIC ANALYSIS: SURVEY AMONG POLISH DECISION MAKERS AND EXPERTSWróna W¹, Golicki D¹, Jakubczyk M¹, Niewada M², Czech M¹, Macioch T¹, Hermanowski T¹¹Department of Pharmacoeconomics, Medical University of Warsaw, Warsaw, Poland,²Department of Experimental and Clinical Pharmacology, Medical University of Warsaw, Warsaw, Poland

OBJECTIVES: The indirect costs seem to be a relevant part of a total cost of illness, although there is no consensus whether they should be included in pharmacoeconomic analysis or which methods of calculations should be used. The aim of the survey was to collect data on practice and preferences of decision-makers and experts in health economics concerning the role and methods of calculating indirect costs in Poland. **METHODS:** The questionnaire contained 18 questions covering the need for indirect